Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An automated chromatography system for the purification of a proteins, comprising a plurality of chromatography columns, a plurality of computer-controlled valves, a pump, at least one loop for the storage of fluid, a detector able to produce an output signal representing the composition of a fluid passing through the detector, a computer provided with and adapted to run software for controlling said valves, pump and detector, wherein said software is able to process the output signal of said detector to identify two signal parameters which parameters are the signal level and the rate of change of the signal level, further wherein said software is adapted to control the system to start and stop the storing of said fluid in the at least one loop when predetermined conditions for one or both of said signal parameters are fulfilled.

Claim 2 (cancelled)

Claim 3 (previously presented): The automated chromatography system of claim 1, wherein said software is adapted to perform predetermined actions when predetermined conditions for said two signal parameters are fulfilled at the same time.

Claim 4 (previously presented): The automated chromatography system of claim 1, wherein said software is adapted to perform predetermined actions when predetermined conditions for one of said two signal parameters is fulfilled.

Claim 5 (previously presented): The automated chromatography system of claim 3, wherein said predetermined conditions for said two signal parameters are default conditions or operator selected conditions.

Claim 6 (withdrawn): A computer readable media comprising program code, the program code capable of being executed by a microprocessor, the program code comprising a method for controlling an automated chromatography system, the method comprising receiving an output signal from a detector and processing the output signal of said detector to identify two signal parameters.

Claim 7 (withdrawn): The computer readable media of claim 6, wherein said computer readable media is adapted to identify said signal level and the rate of change of said signal level.

Claim 8 (withdrawn): The computer readable media of claim 6, wherein said computer readable media is adapted to perform predetermined actions when predetermined conditions for said two signal parameters are fulfilled at the same time.

Claim 9 (withdrawn): The computer readable media of claim 6, wherein said computer readable media is adapted to perform predetermined actions when predetermined conditions for one of said two signal parameters is fulfilled.

Claim 10 (withdrawn): The computer readable media of claim 8, wherein said computer readable media is adapted to allow an operator to select default predetermined conditions for said two signal parameters or to input operator–selected predetermined conditions.

Claim 11 (withdrawn): The computer readable media of claim 9, wherein said computer readable media is adapted to allow an operator to select default predetermined conditions for said two signal parameters or to input operator–selected predetermined conditions.

Claim 12 (withdrawn): The automated chromatography system of claim 4, wherein said predetermined conditions for said two signal parameters are default conditions or operator selected conditions.